Environmental Research Pavilion

Plan•Design•Build•Change 2009

Flying Dust First Nation

The Environmental Research Pavilion is an extraordinary achievement. It is an example of what is possible when community members, volunteers and neighbours come together to make positive change a reality.

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Foreword

The Environmental Research Pavilion in Flying Dust First Nation is an extraordinary example of how to make a difference locally. It is a celebration of community action and collaboration. It is also a demonstration of what is possible when a community is guided by a broad Vision for the future and an action-oriented Community Plan.

The Pavilion is an illustration of the community-based, locally focused and project driven approach established in Flying Dust's Community Plan. The site selection, program development, design and building were all community-based. The focus was on using and reusing local resources and materials. Local skills and energy were critical in making this project possible. The way the Environmental Research Pavilion was conceived, designed and built would not have been possible without the contributions from community members young and old, community leaders and staff, skilled tradespeople, volunteers and community organizers. Collaboration also extended beyond the community with support from Indian and Northern Affairs Canada, planners and architecture students from Halifax as well a numerous local companies and businesses, including NorSask Forest Products, HomeAll Building Centre, Aces Building Centre, Acklands Grainger, P3 Architects, Meadow Lake Pulp Ltd. and Meadow Lake Salvage Yard.

The development of the Environmental Research Pavilion served as a venue for local capacity building in design and building, environmental practices such as the recycling and reusing of old materials, economic development, community engagement and strengthening and building new partnerships. Community planning, design, building and change came together. In the end, the Environmental Research Pavilion, like other projects that will come after it, responds to an immediate need, building a stronger community.

This document is meant to commemorate the hard work and effort of a determined community that came together to make change happen. It also illustrates that positive change can result from rethinking what is possible when developing any project. The Environmental Research Pavilion is a model for change and a source of local pride.

2006

Over the course of a year, many workshops were held and intense discussions had, that led to a Plan and a sense of collective purpose in Flying Dust.

2007

Comprehensive Community-Based Planning (CCBP) pilot project begins.

2008

Flying Dust First Nation Community Plan published. Concerted effort goes into implementing projects and ideas in the Plan.

2009

The Plan represents Flying Dust's hopes for the future and an approach and commitment to change.

Community Planning Timeline

Environmental Research Pavilion Kick Start Project developed over a two week period in July.

Continuing to shape the future

JULY

PLAN

DESIGN

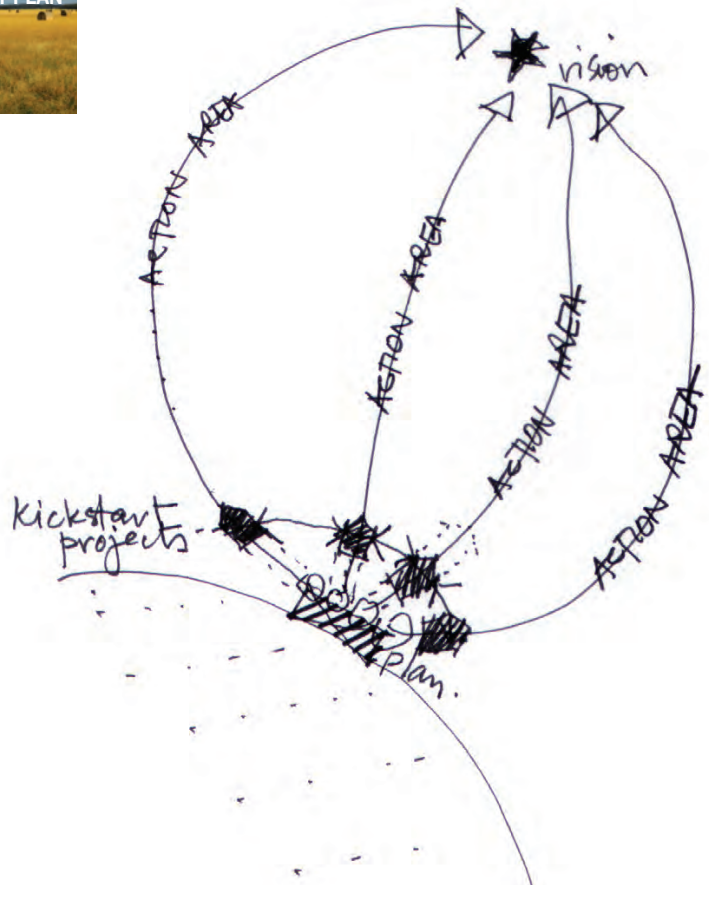
BUILD

CHANGE

The Community Plan is the foundation. It captures Flying Dust's resources, strengths, issues and aspirations. It's a tool to guide and orchestrate change. It sets a bold, clear **Vision** and an approach to change that affects everything Flying Dust does.

Community Vision

Through teamwork and the teachings of our Elders, we will build a strong, healthy and self-sufficient Nation.



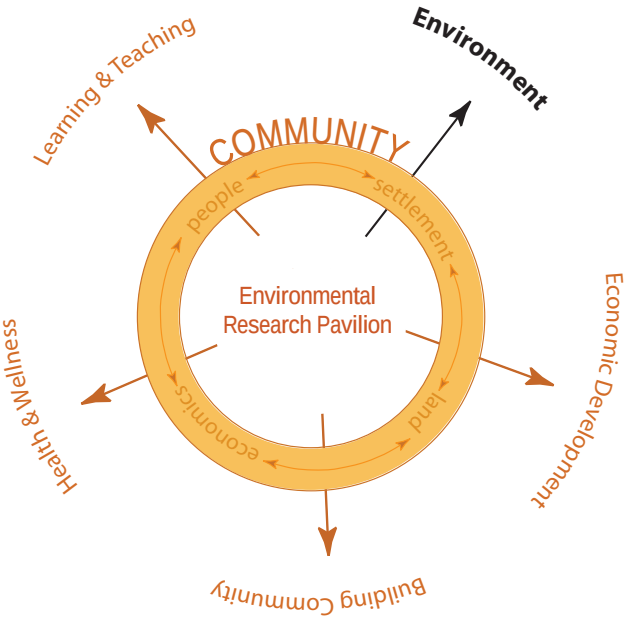
Action Areas provide specific direction to move towards the Vision. Each Action Area includes Kick Start Projects that serve as examples for how change can happen.

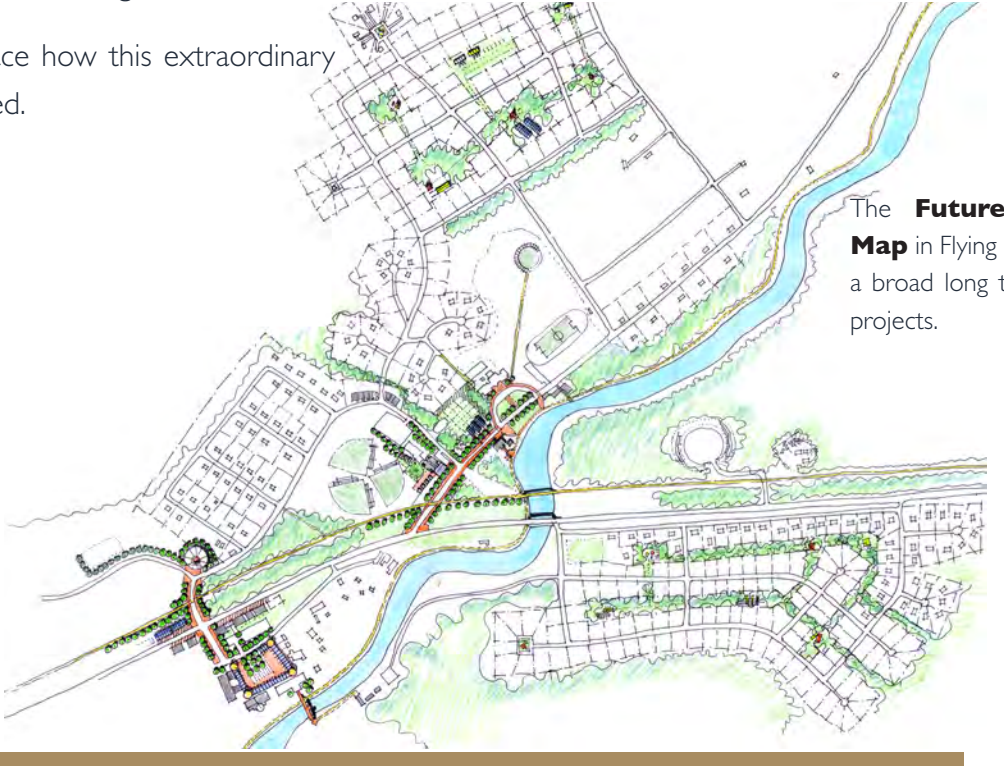
The **Environmental Research Pavilion** is one of the Kick-start projects. The intention of the Pavilion is to help community members understand, protect, enhance and monitor the environment.

The Environmental Research Pavilion stands as an important accomplishment and a remarkable example of what people can do together to make change happen. In this sense it is about **Building Community** on multiple levels: socially, physically and organizationally.

It illustrates how every project should attempt to do the **most with the least** and can be seen as an opportunity to advance many Action Areas. This project is one example of how to rethink the way all projects are developed. It demonstrates that projects do not have to be limited by budgets, government regulations or existing solutions.

The following pages trace how this extraordinary accomplishment unfolded.

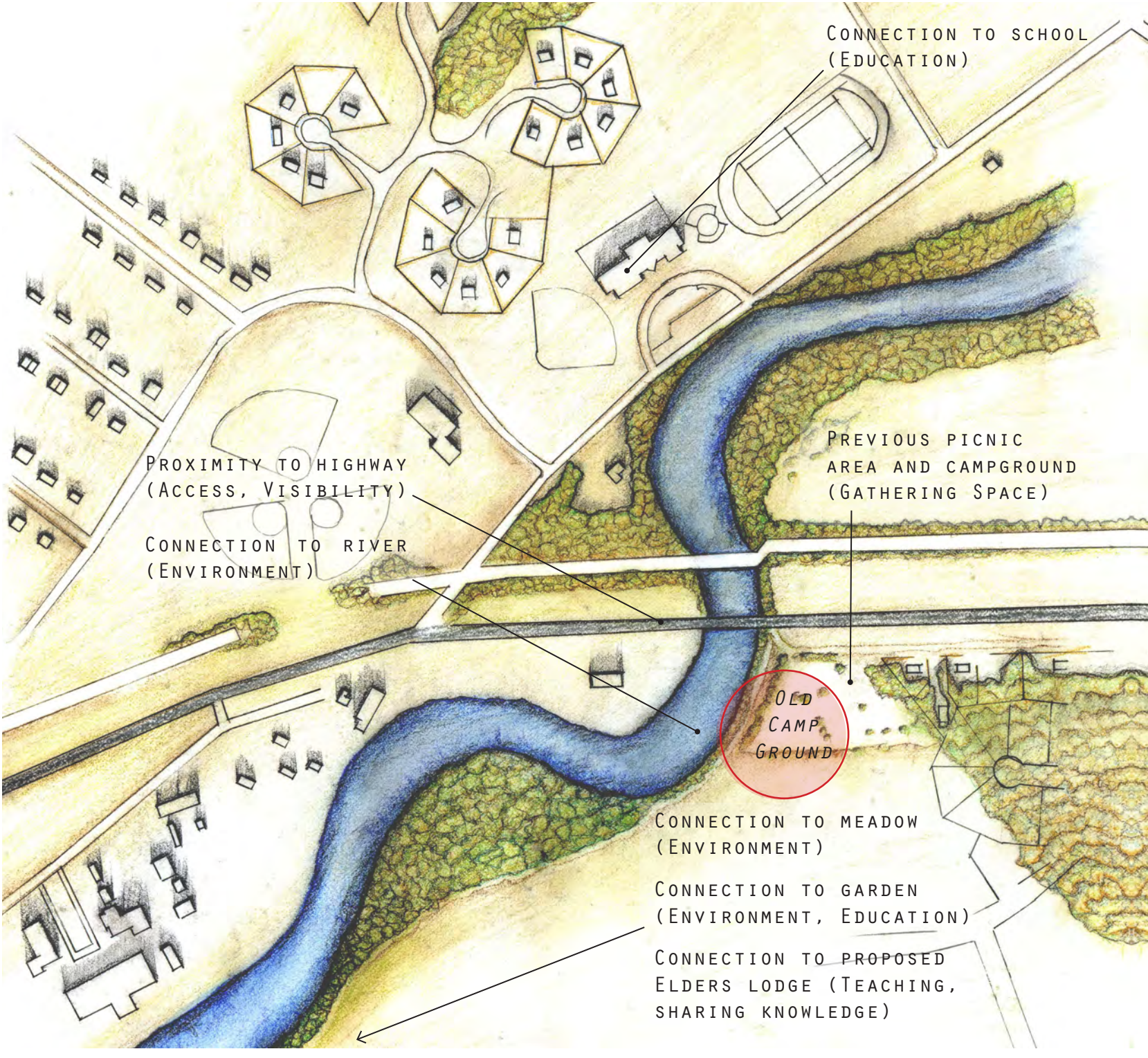




The **Future Development Map** in Flying Dust's Plan provides a broad long term context for all projects.

Thinking broadly about Flying Dust as a whole and seeing every project as an opportunity to connect, extend and inspire all aspects of the community, Band members, planners, architecture students and Meadow Lake Tribal Council staff look for a perfect site for the Environmental Research Pavilion.

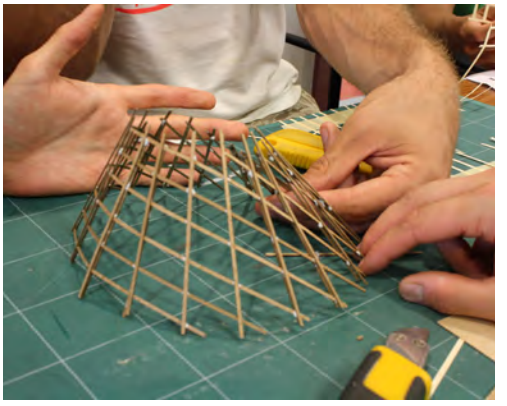
COMMUNITY BASED: SITE SELECTION


Connection to school
(Education)
Proximity to highway
(Access, Visibility)
Connection to river
(Environment)
Previous picnic
area and campground
(Gathering Space)
Old
Camp
Ground
Connection to meadow
(Environment)
Connection to garden
(Environment, Education)
Connection to proposed
Elders lodge (Teaching,
sharing knowledge)

With the **Vision** in mind, project participants of all ages work together to further determine the use and design of the Environmental Research Pavilion.

The **community-based** design process engages community members in many ways...

...brainstorming...



...building models...

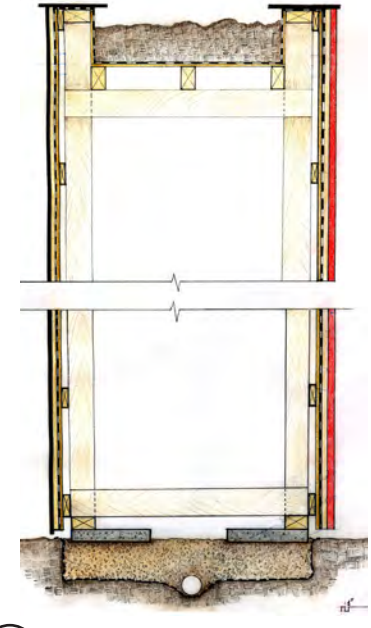
Community Based: Process

...drawing...

...and visualizing.

Many ideas are generated.

A Wall



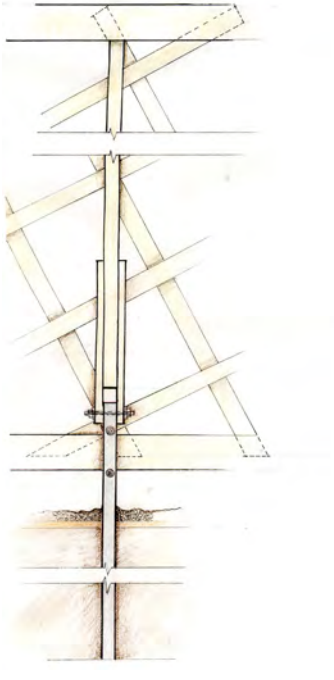
From the community-based design sessions, two main **design elements** that make up the Environmental Research Pavilion are developed.

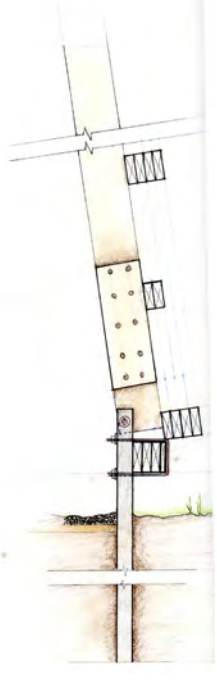
The wall is an educational tool that will assist people in learning about and interacting with the surrounding environment. It incorporates counter space, a sink and display areas. It also has a green roof to grow native grasses and a rainwater collection system.

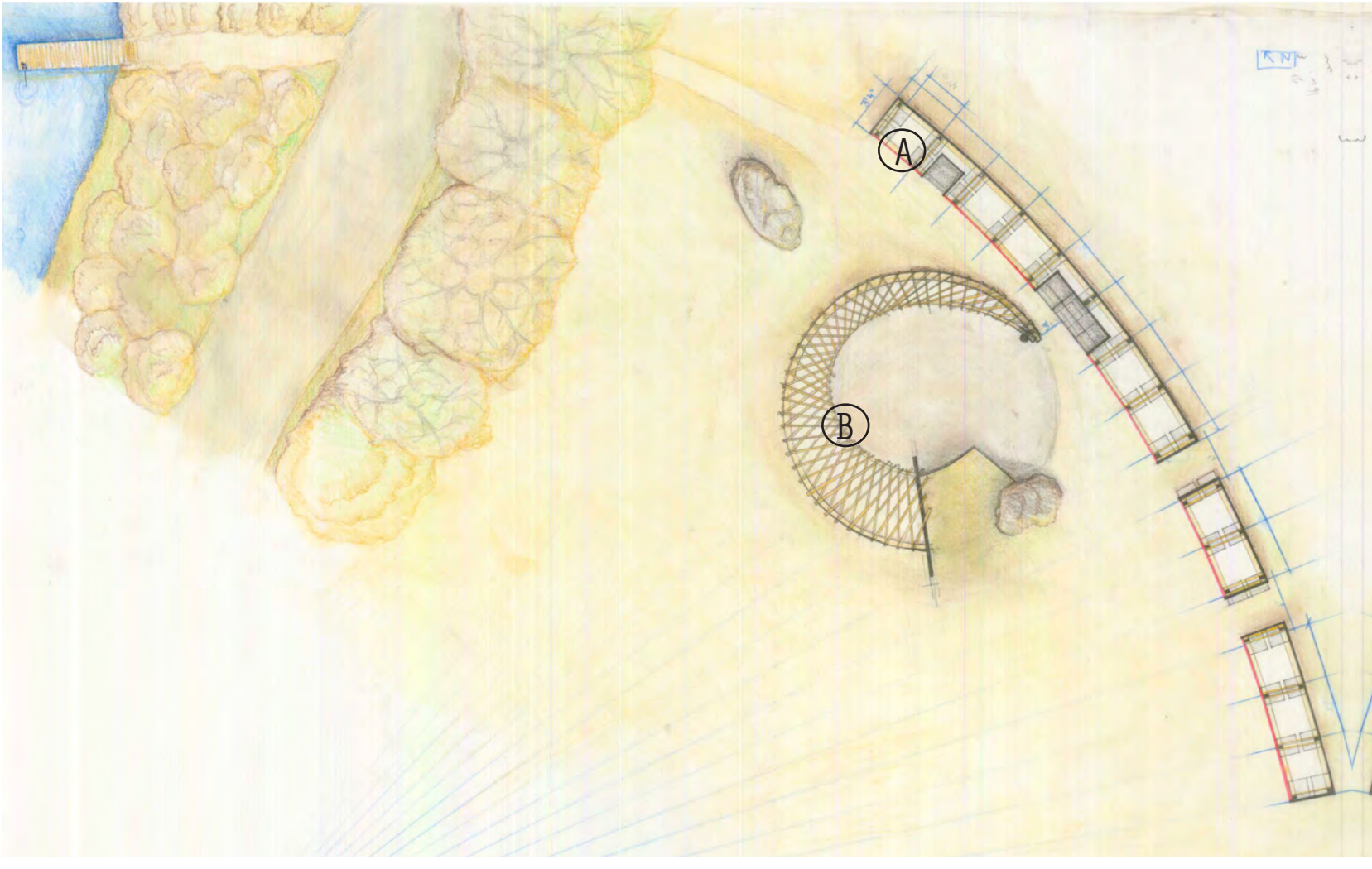
The lattice structure is inspired by the teepee and serves as an informal gathering space to share ideas and knowledge. The lowest edge of lattice wall incorporates a garden.
The placement of the structure on the site is inspired by the **circular** shape of the teepee. The two main design elements (the wall and the lattice) form two circles on the site.

The inner circle is made by the lattice structure. The lattice structure is protected from the north wind and the noise of the highway by the arc of the wall which forms the second circle. This larger arc connects to the four cardinal directions: **north, east, south and west.** The implied circle also connects to the surrounding environment encompassing the river, woods and field.

B Lattice






A
B

The Environmental Pavilion includes the following design features:

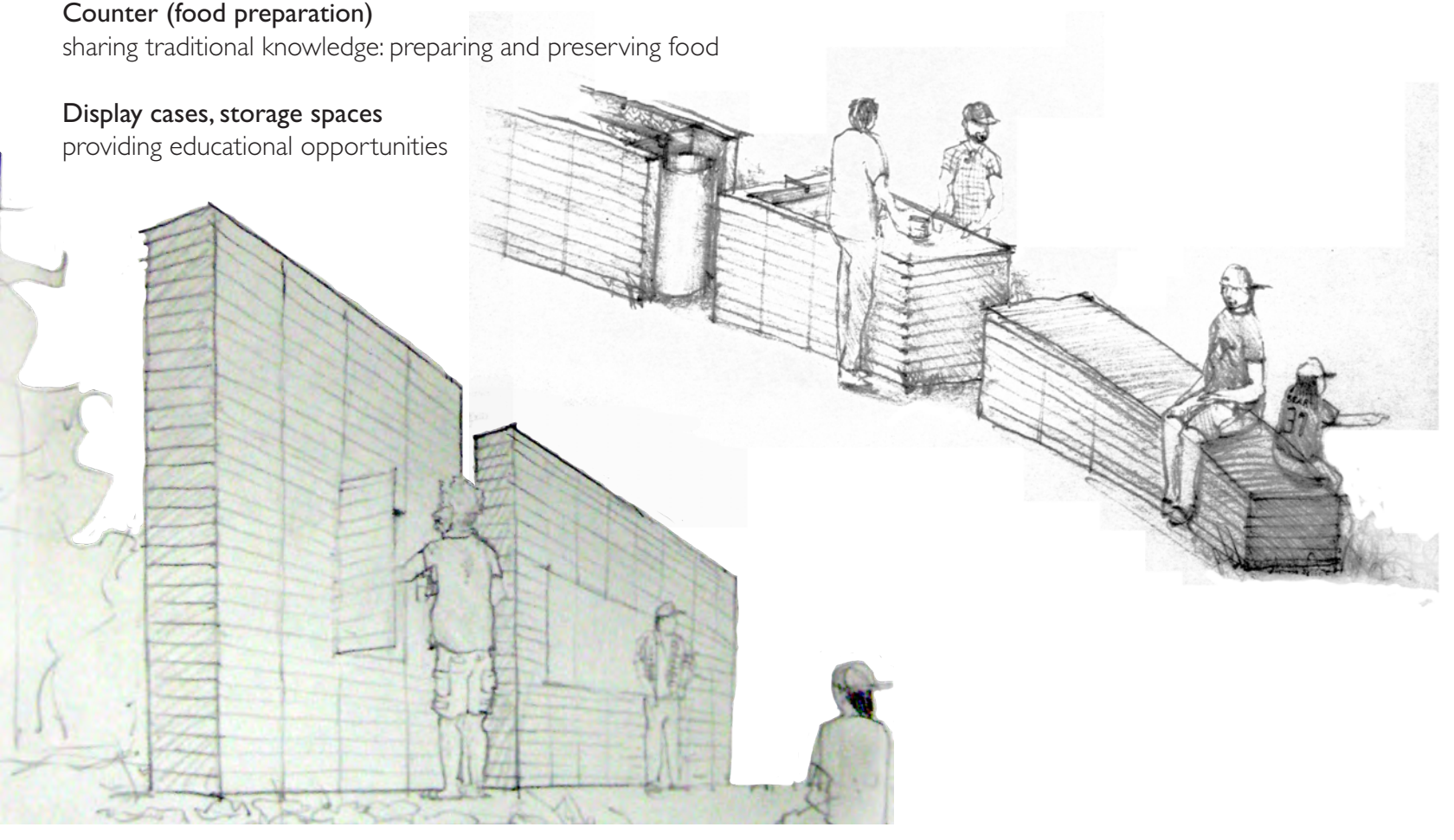
Water spout, rainwater storage tank
environmental building practices

Counter (lab space)
connection to school curriculum: science projects and experiments

Green roof, rainwater collection
interaction with the natural environment

Counter (food preparation)
sharing traditional knowledge: preparing and preserving food

Display cases, storage spaces
providing educational opportunities

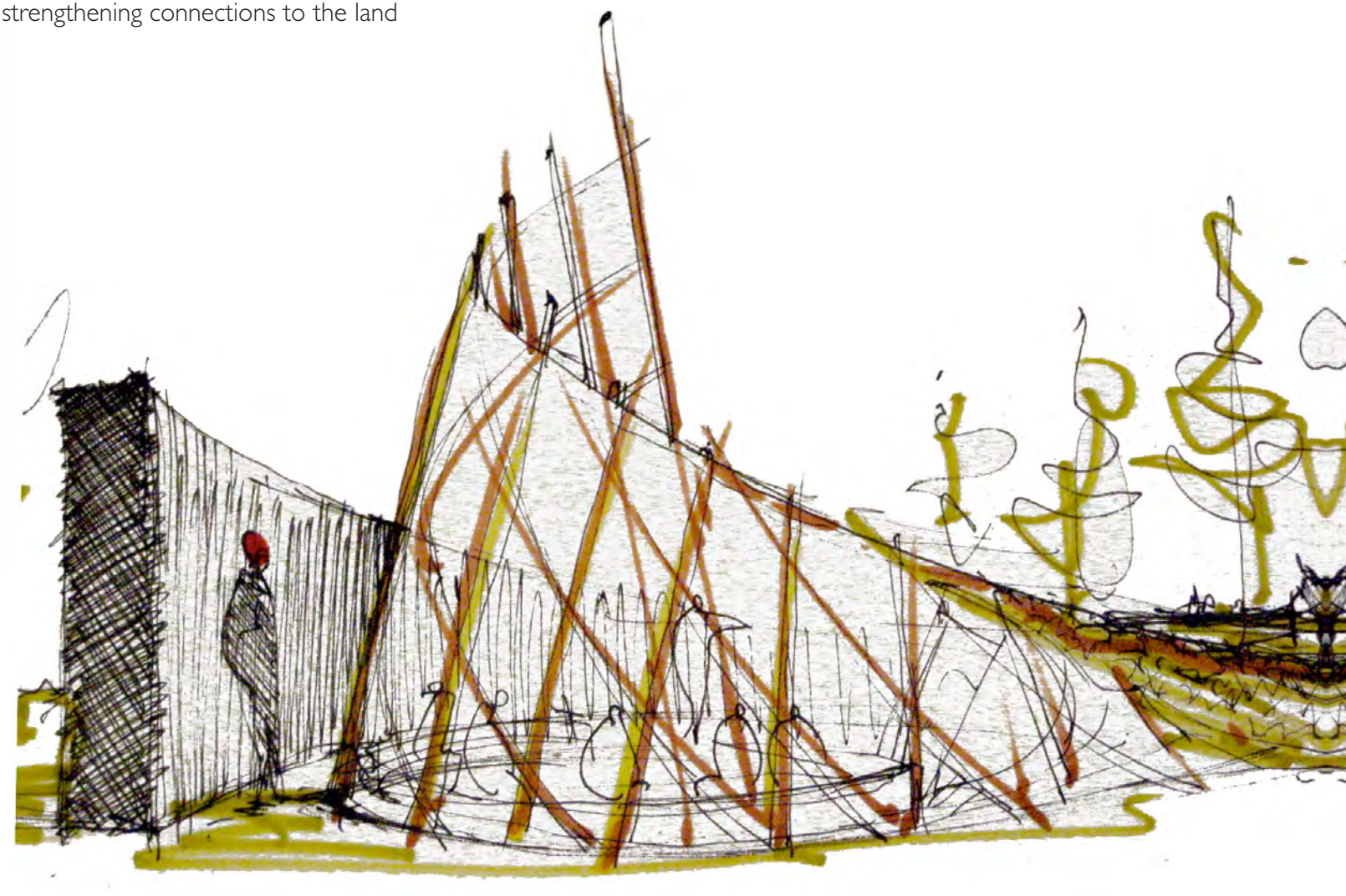


Gathering space
sharing knowledge, space for community events and cultural activities

Adapted to local Climate
north facing wall providing shelter from wind and the highway

Circular Form
building on local and traditional knowledge

Garden
strengthening connections to the land



Many of the materials used to build the Environmental Research Pavilion were recycled or reused.

Local Materials

Old drainage pipe
(Abandonned House)

French Drain

Sink Lid
(Abandonned House)

water spout

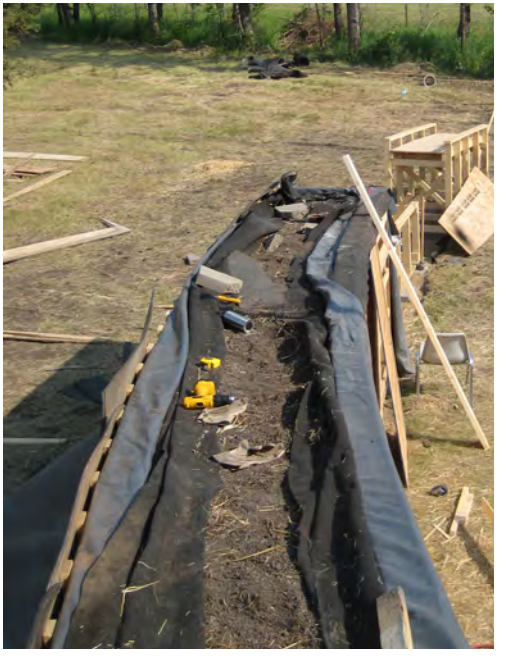
sink
(Abandonned House)

sink

Conveyor Belt (Donated by Pulp Mill)

Used pipe (Flying Dust Garbage Dump)

Used Membrane (Donated by Pulp Mill)



cladding

Footings

Green Roof

Local Materials

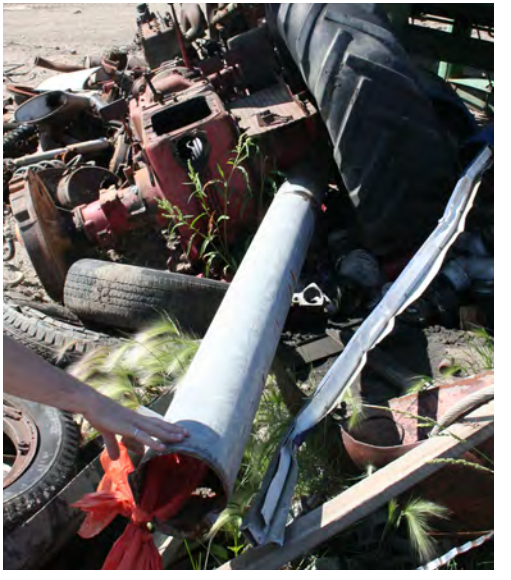
Fence
(Flying dust Garbage Dump)

Gabion Wall for Garden

Rebar
(Flying dust Garbage Dump)

Concrete Reinforcement

Old Pole
(Meadow Lake Salvage Yard)



Centre Post

Gravel and Sand
(Donated by Flying Dust)

Foundation & Drainage

Weathered Plywood
(Donated by HomeAll)

Walls & Counter

Unfinished Lumber
(Donated by NorSask)

Lattice

Local Materials

Community members are involved in preparing the site and building the wall and lattice.

Local knowledge in carpentry, heavy machinery, financing, advertising and traditional building and design, are used to move the project forward and make it a success.

Local Labour, Expertise & Knowledge

Community Involvement

Cooperation

Traditional Building

Local Labour, Expertise & Knowledge

Experience & Trades

Learning & Teaching

Fun

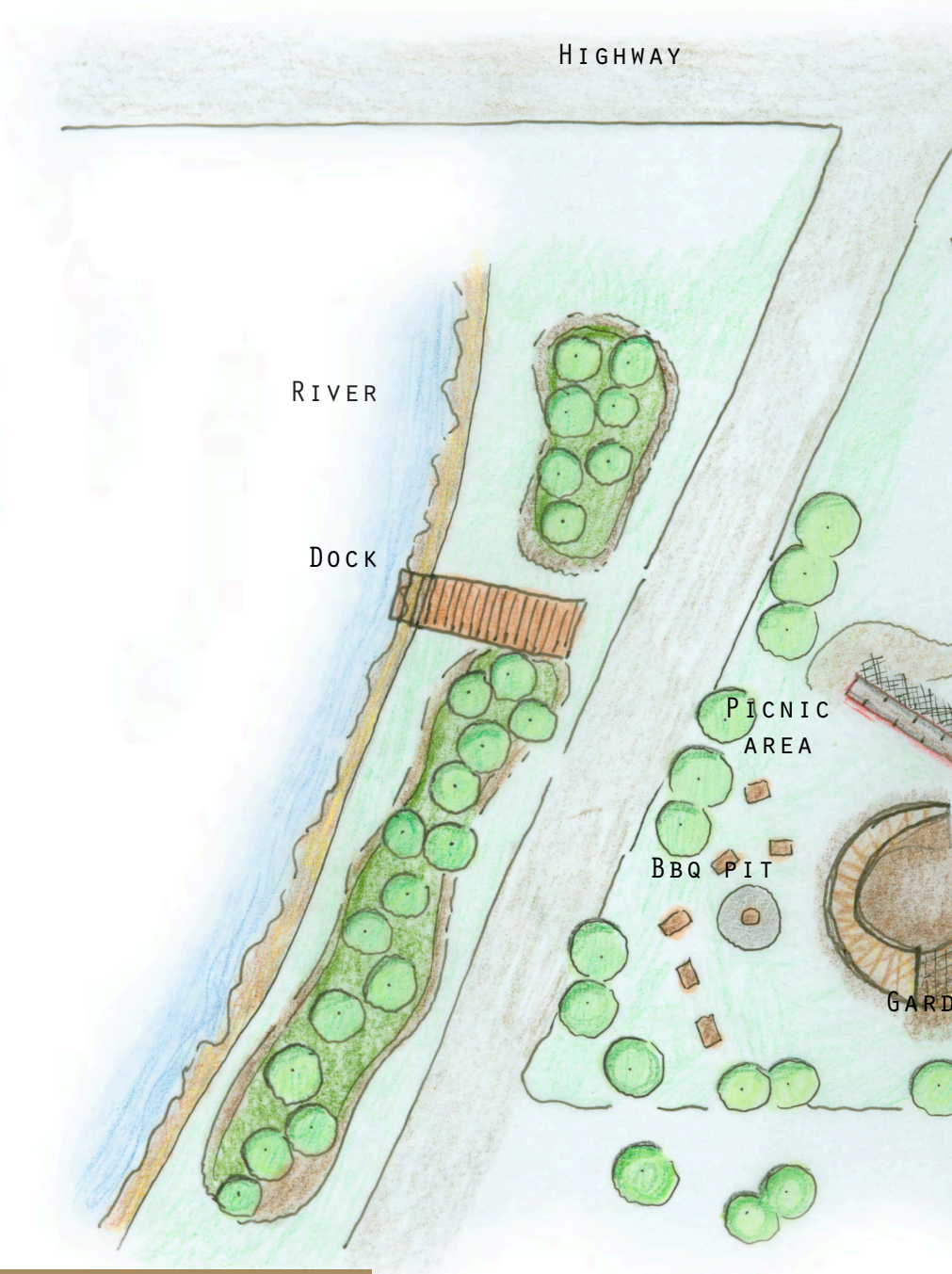
Project Driven: Environmental Research Pavilion

The Environmental Research Pavilion is a visible example of successfully implementing the Community Plan and making positive change a reality. Building on the momentum of this project, community members will continue to move forward, taking action to shape their future and achieve their Community Vision.

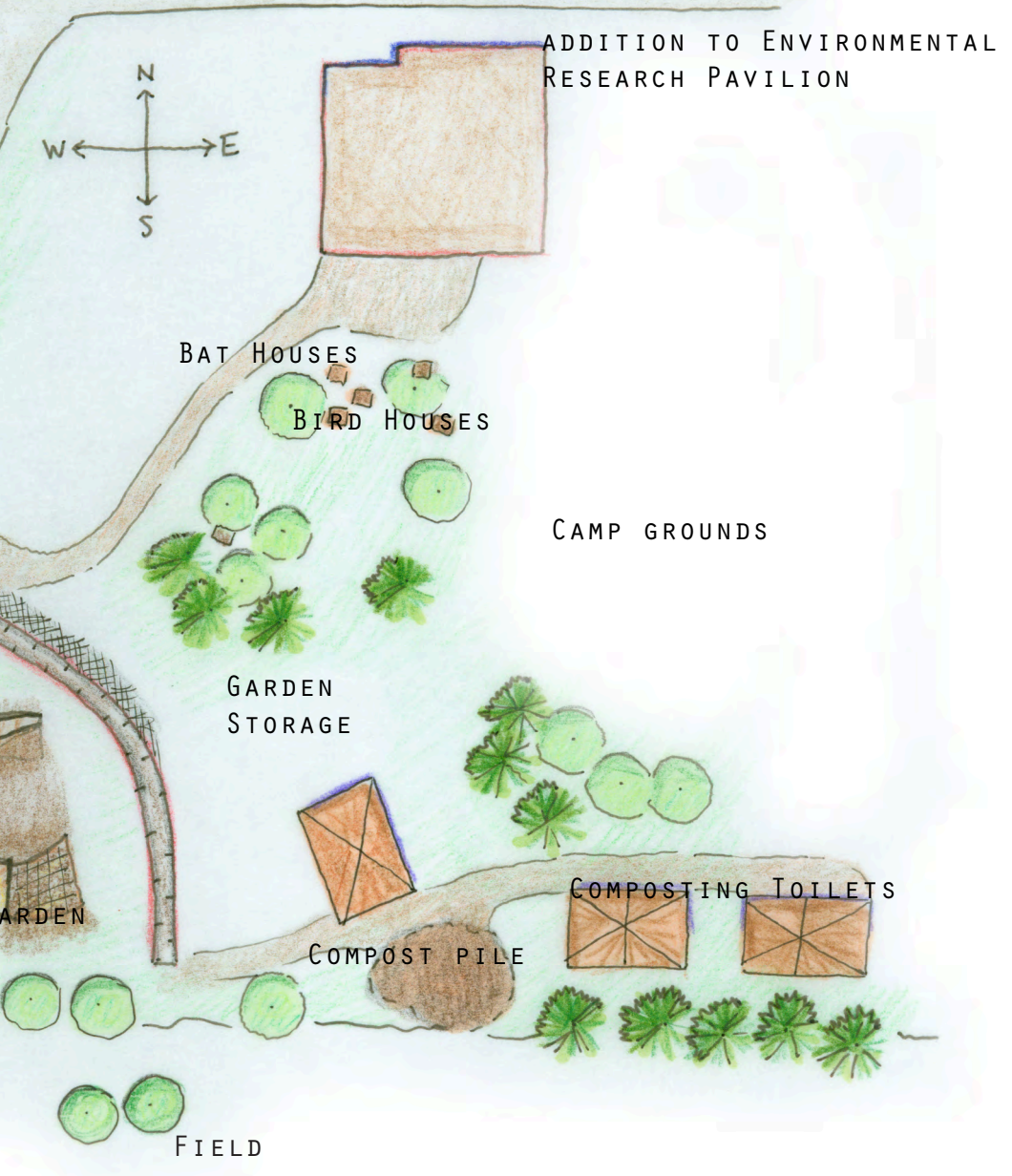
This sketch depicts the many ideas community members had for future development of the site. They reflect Flying Dust's strong commitment to the environment and their desire to develop educational programs and other opportunities for research and natural resource management. In this sense the Environmental Research Pavilion is about much more the physical structure depicted in this document.; it is the starting point for something much greater.

Programming ideas connected to the Environmental Research Pavilion:

- interactive learning space for local schools, groups and other educational institutions
- environmental monitoring
- tourism
- gathering space for community activities and events
- gardening: growing, cooking and consuming local food
- sharing traditional knowledge and practices: medicinal plants, preparing and preserving food

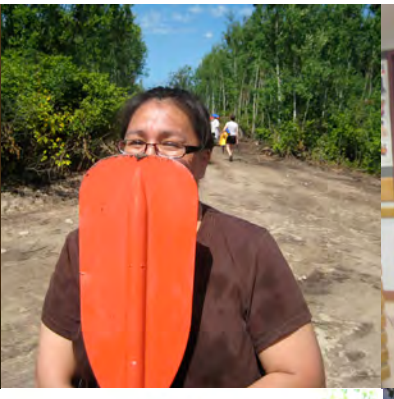


Project Driven: Future Development


addition to Environmental
Research Pavilion
N
W
E
S
Bat Houses
Bird Houses
Camp grounds
Garden
Storage
Composting Toilets
Compost pile
Field

DENTAL CLINIC

WP 1550



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